

DECLARATION OF CE CONFORMITY

The manufacturer:	FARO S.p.A. Via Faro, 15 20060 Ornago (Milano) ITALY	It fully conforms to the following European directives and national acceptances: 93/42/CEE (medical devices directive)
declares under its own responsibility that following product:		Class which the equipment belongs to: IIa
Product name:	Dental Practice Micromotor	It conforms to the following standards:
Model in the version:	Unica	CEI EN 60601-1 EN 50011 CEI 110-6
It is factory new in accordance with the provisions of art. 6 para 2 of D.L. 626/94		Dott. Angelo Favonio Managing Director

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SYMBOLS USED IN THIS MANUAL



Danger

The paragraphs marked with this symbol contain instructions to be followed carefully to avoid damage to the device, the operator and the patient.



Prohibition

This icon identifies what to prevent doing to avoid damage to the device.



Warning

These instructions warn to be very careful to avoid situations which could damage the device.



Suggestions

With this icon information is supplied permitting more effective use of the device.

SAFETY RULES



- Device of class II
- Device of type B

- Follow all instructions set forth in this manual.
- This device is to be used in a dental practice only by medical personnel.
- **To avoid cross contamination between patients fit the device to or remove it from handpiece taking care to avoid contact with hands or contaminated gloves.**



- **The device is not suitable for use in presence of anesthetic mixtures inflammable with air, oxygen or nitrous oxide.**
- **The device is not protected against liquids penetration.**
- The device is not delivered sterilized, therefore it must be cleaned before use (see page 36).
- **The device is not sterilizable.**



- The device does not require lubrication.
- A "dental practice hanpiece" in conformity with ISO 3964 is connected to device . The device is connected to a Faro cable.

- **To operate safely this device should be used with FARO electronic circuit.**

- Never attempt any maintenance on electrical part when cable is connected. Do not attempt to repair either the device or associated electronic circuit.



- Only perform operations described in this manual. In all other cases apply to our Service Department.
- **When the equipment is packed, it can lie 15 weeks to environmental conditions that do not exceed the following ranges:**
 - ⇒ Surrounding temperature of -20°C (-4°F) or +70°C (+158°F)
 - ⇒ Relative humidity from 10% to 90%
 - ⇒ Atmospheric pressure from 500 to 1060 mBar.
- **The micromotor must be powered in conformity with CEI EN 60601-1.**

FEATURES

The device is an electrical Micromotor which supplies kinetic energy to a handpiece fit on its end. It also supplies light energy, in INTRALUX M 40 L version, with a light bulb installed into the device.

"UNICA" Micromotor is produced in the following versions:

20000 rpm with external spray

20000 rpm Intramatic

40000 rpm with external spray

40000 rpm Intramatic

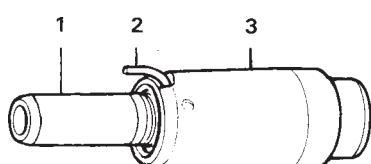
40000 rpm Intramatic with light "INTRALUX M 40 L"

- Dental practice micromotors of "UNICA" series are designed to give a safe and at the same time an ergonomic grip without irregular surfaces.
- **A single cable powers all versions of the "UNICA" series including versions with light.**
- Micromotors of the "UNICA" series are designed to supply kinetic energy to a handpiece (not provided) fit on its end. In its various versions the device allows passage of water and air for cooling spray on burr. It also supplies light to handpieces with optical fiber.

DESCRIPTION OF PARTS

*20000 or 40000 rpm Micromotor with external spray
(internal mixing)*

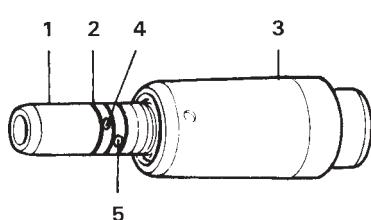
- 1 Handpiece coupling
- 2 Spray tube
- 3 Micromotor body



DESCRIPTION OF PARTS

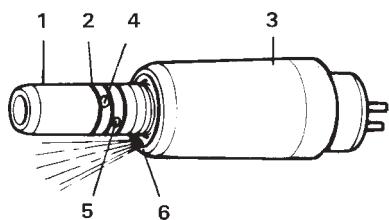
20000 or 40000 rpm Micromotor Intramatic

- 1 Handpiece coupling
- 2 O-ring
- 3 Micromotor body
- 4 Air
- 5 Water



DESCRIPTION OF PARTS

40000 rpm Micromotor Intramatic with light
"INTRALUX M 40 L"



- 1 Handpiece coupling
- 2 O-ring
- 3 Micromotor body
- 4 Air
- 5 Water
- 6 Light bulb

INSTALLATION

Check to make sure the following items are received:

- Dental practice micromotor (in the requested version)
- Tubes (for external spray versions)
- Pins
- O-rings (for Intramatic versions)
- Operating manual

• THE DEVICE CAN BE INSTALLED BY USER.



- Fit micromotor in the base of cable.
Screw down ringnut of cable to micromotor clockwise.

OPERATING INSTRUCTIONS

After connecting micromotor to cable, check if the following operations are performed:

- Motor turns.
- In external spray version, AIR and WATER come out of tube "A" (fig. 1).
- In Intramatic version, AIR comes out of hole "B" and WATER comes out of hole "C" (fig. 2).
- In "Intralux" version, light bulb lights.

After the above checks, connect handpiece.

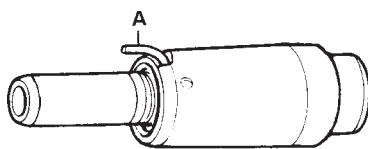


fig. 1

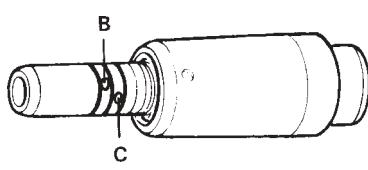


fig. 2

MAINTENANCE



- The device must be cleaned after each operation.
- Before cleaning the device disconnect cable.
- The device is not protected against liquid penetration.
- Clean the micromotor, including cable, with a cloth moistened with disinfectant or non-abrasive detergent.



- **THE DEVICE IS NOT STERILIZABLE.**

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Lubrication

In the "INTRAMATIC" version it is recommended to lubricate the 3 O-rings "A" regularly with vaseline to limit wear and ensure perfect seal of water and air (fig. 3).



- Do not lubricate any other mechanical part of micromotor.

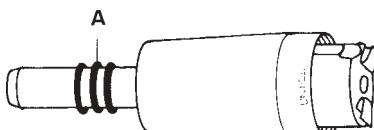


fig. 3

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Replacing brushes

To replace brushes proceed as follows (fig. 4):

- Disconnect micromotor from cable by unscrewing rear ringnut.
- Using special pin, remove contact blade with brush.
- Clean brush housing with compressed air.
- Fit new brushes.
- Connect cable to micromotor and tighten rear ringnut.

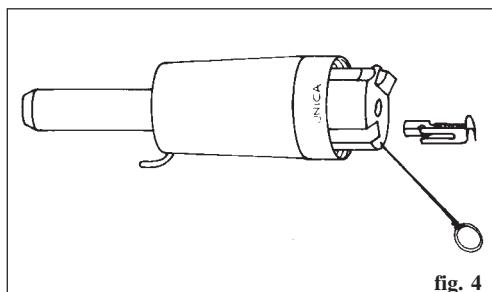


fig. 4

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Changing light bulb on version "INTRALUX M 40 L"

To change light bulb proceed as follows (fig. 5):

- Remove external case "A" in direction of arrow.
- Use small screwdriver as lever on light bulb base and withdraw it from its housing.
- Fit new light bulb without touching it with fingers. To clean light bulb use cloth dampened with alcohol.
- Return case "A" to original position taking care to position reference pin "B" in its seat "C".

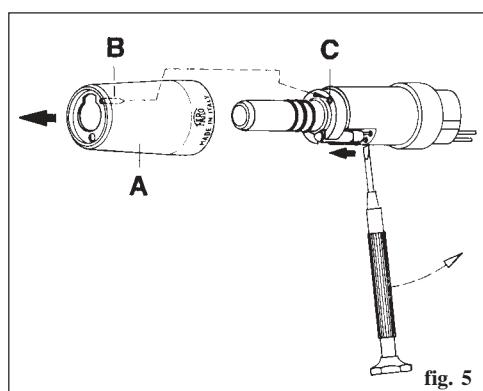


fig. 5

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TROUBLESHOOTING

Micromotor leaks water or air.	- Check O-rings on handpiece coupling and replace them if necessary (see page 37 fig. 3). - In case of difficulty call our Service Department.
Micromotor does not run.	- Check brushes and replace them if necessary (see page 38 fig. 4). - In case of difficulty call our Service Department.
Light bulb does not light.	- Check light bulb condition and replace it if defective (see page 39 fig. 5). - Apply only to FARO Service Centers for parts and service.

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DATA SHEETS

20.000 and 40.000 rpm "External spray" and "Intramatic" versions

Rotation speed	: from 1.200 to 20.000 and from 2.500 to 40.000 rpm
Power supply	: from 2 to 24 V d.c.
Maximum current absorbed	: 1,8 A
Power output	: 17,5 W (20.000 rpm), 27 W (40.000 rpm)
Maximum torque at shaft	: 1,7 Ncm (20.000 rpm), 0,81 Ncm (40.000 rpm)
Stalling torque	: 4,8 Ncm (20.000 rpm), 6 Ncm (40.000 rpm)
Air consumption at handpiece at 2,5 bar	: 4,67 l/min
Spray water consumption at 2 bar	: 160 ml/min (20.000 rpm-40.000 rpm)
Motor cooling air consumption at 2,5 bar	: 8 l/min (40.000 rpm)
Intermittent operation	: 1' 30" (full load) 8' (time out)
Weight	: 98 g (external spray or intramatic)

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40.000 rpm "Intralux M 40 L" version

Rotation speed	: from 2.500 to 40.000 rpm
Power supply	: from 2 to 24 V d.c.
Maximum current absorbed	: 1,8 A
Power output	: 27 W
Maximum torque at shaft	: 0,81 Ncm
Stalling torque	: 6 Ncm
Air consumption at handpiece at 2,5 bar	: 4,67 l/min
Spray water consumption at 2 bar	: 160 ml/min
Motor cooling air pressure	: 2,5 bar
Light bulb input voltage	: 3,5 V d.c.
Motor cooling air consumption at 2,5 bar	: 8 l/min
Intermittent operation	: 1' 30" (full load) 8' (time out)
Weight	: 98 g (Intralux)

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GUARANTEE CERTIFICATE

FARO grants to the final customer a **12-months** guarantee starting from the date of the purchase invoice. Repairs under the guarantee shall be done at the **FARO** premises or by an authorized **FARO Service** person with transportation costs and risks at the expense of the purchaser. The guarantee certificate found on the endleaf of this booklet is considered valid only if it is entirely completed and bears the reseller's stamp. Repairs under guarantee (during the period of effectiveness) will be done only if the article to be repaired is accompanied by the shipping note or purchase invoice. The guarantee covers failures due to poor material quality or manufacturing defects and in case of legitimate claim the guarantee will allow repair or replacement free of charge. **No compensation for damages and/or interest will be recognized.** The guarantee is not deemed valid in the final judgment of FARO in case of tampering, damage, incorrect use, faulty maintenance or normal wear. The guarantee does not cover light bulbs and fuses.

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